

9th LHCb Computing Workshop

Report of Contributions

Contribution ID: 1

Type: **not specified**

Status of CERN analysis preservation project

Wednesday 17 May 2017 09:00 (30 minutes)

Presenter: SIMKO, Tibor (CERN)

Session Classification: -

Contribution ID: 2

Type: **not specified**

The RECAST project

Wednesday 17 May 2017 09:30 (25 minutes)

Presenter: HEINRICH, Lukas Alexander (New York University (US))

Session Classification: -

Contribution ID: 3

Type: **not specified**

Docker and Singularity (see Friday afternoon session)

Session Classification: -

Contribution ID: 4

Type: **not specified**

CERN cloud infrastructure

Wednesday 17 May 2017 09:55 (30 minutes)

Openstack, VMs, docker on a VM,
Kubernetes etc

Presenters: VAN ELDIK, Jan (CERN); BRITO DA ROCHA, Ricardo (CERN)

Session Classification: -

Contribution ID: 5

Type: **not specified**

LHCb analysis preservation roadmap

Wednesday 17 May 2017 10:50 (30 minutes)

Presenter: NEUBERT, Sebastian (Ruprecht-Karls-Universitaet Heidelberg (DE))

Session Classification: -

Contribution ID: 6

Type: **not specified**

Discussion session

Wednesday 17 May 2017 11:20 (30 minutes)

- Feedback on roadmap document
- How to maintain an AP software stack?

Session Classification: -

Contribution ID: 7

Type: **not specified**

Status of new framework and performance measurements

Thursday 18 May 2017 09:00 (40 minutes)

Presenter: PONCE, Sebastien (CERN)

Session Classification: -

Contribution ID: **8**

Type: **not specified**

Performance measurements

Session Classification: -

Contribution ID: 9

Type: **not specified**

Analysis pipeline toolkits

Wednesday 17 May 2017 14:00 (30 minutes)

General concepts, use cases in LHCb, evaluation procedure

Presenter: BURR, Chris (University of Manchester (GB))

Session Classification: -

Contribution ID: **10**

Type: **not specified**

Outcome of Intel workshop

Thursday 18 May 2017 09:40 (20 minutes)

Presenter: SEYFERT, Paul (CERN)

Session Classification: -

Contribution ID: **11**

Type: **not specified**

Performance metrics in PR2

Thursday 18 May 2017 10:00 (20 minutes)

Presenters: HASSE, Christoph (CERN / Technische Universitaet Dortmund (DE)); SZYMANSKI, Maciej Pawel (University of Chinese Academy of Sciences (CN)); ROISER, Stefan (CERN)

Session Classification: -

Contribution ID: 12

Type: **not specified**

Status of conditions database

Thursday 18 May 2017 10:20 (20 minutes)

Presenter: HEGNER, Benedikt (CERN)

Session Classification: -

Contribution ID: 13

Type: **not specified**

Undergraduate Laboratory Experiment: Measuring Matter Antimatter Asymmetries at the Large Hadron Collider

Wednesday 17 May 2017 16:00 (20 minutes)

Example showcasing analysis preservation and open data

Presenter: PARKES, Chris (University of Manchester (GB))

Session Classification: -

Contribution ID: 14

Type: **not specified**

Detector description

Thursday 18 May 2017 10:40 (20 minutes)

Presenter: COUTURIER, Ben (CERN)

Session Classification: -

Contribution ID: 15

Type: **not specified**

Tracking

Thursday 18 May 2017 14:00 (15 minutes)

Presenters: DZIURDA, Agnieszka (CERN); HASSE, Christoph (CERN / Technische Universitaet Dortmund (DE))

Session Classification: -

Contribution ID: **16**

Type: **not specified**

RICH

Thursday 18 May 2017 14:15 (15 minutes)

Presenter: JONES, Christopher Rob (University of Cambridge (GB))

Session Classification: -

Contribution ID: 17

Type: **not specified**

CALO – canceled

Thursday 18 May 2017 14:30 (15 minutes)

Session Classification: -

Contribution ID: **18**

Type: **not specified**

MUON

Thursday 18 May 2017 14:45 (15 minutes)

Presenter: SANTIMARIA, Marco (INFN e Laboratori Nazionali di Frascati (IT))

Session Classification: -

Contribution ID: **19**

Type: **not specified**

Upgrade HLT

Thursday 18 May 2017 15:00 (25 minutes)

Presenter: LUPTON, Olli (CERN)

Session Classification: -

Contribution ID: **20**

Type: **not specified**

Migrating analysis software to the new framework

Friday 19 May 2017 09:20 (20 minutes)

Presenter: RODRIGUES, Eduardo (University of Cincinnati (US))

Session Classification: -

Contribution ID: 21

Type: **not specified**

Advanced CERN cloud infrastructure

Kubernetes, Docker Swarm and all that.

Presenter: BRITO DA ROCHA, Ricardo (CERN)

Session Classification: -

Contribution ID: 22

Type: **not specified**

Preparing the TDR

Friday 19 May 2017 11:00 (1 hour)

Session Classification: -

Contribution ID: 23

Type: **not specified**

Capturing meta data: Review of LHCb databases (t.b.d)

WGDB, Stripping archive, production DB, lhcbdocs/Status, Publications DB, ...

Session Classification: -

Contribution ID: 24

Type: **not specified**

Computing Resources in Run 3

Friday 19 May 2017 09:40 (20 minutes)

Presenter: BOZZI, Concezio (CERN and INFN Ferrara)

Session Classification: -

Contribution ID: 25

Type: **not specified**

Data storage and access

Wednesday 17 May 2017 14:30 (30 minutes)

EOS and all that

Presenters: MOSCICKI, Jakub (CERN); MASCETTI, Luca (CERN); LAMANNA, Massimo (CERN)

Session Classification: -

Contribution ID: 26

Type: **not specified**

Annotations and comments (t..b.d)

hypothes.is and ORCID

Session Classification: -

Contribution ID: 27

Type: **not specified**

Measuring code performance with valgrind, perf and vtune

Thursday 18 May 2017 16:15 (45 minutes)

Presenter: HADJI, Monir (Universite Claude Bernard-Lyon I (FR))

Session Classification: -

Contribution ID: **28**

Type: **not specified**

Roadmap for Sim10

Tuesday 16 May 2017 09:00 (30 minutes)

Presenter: CORTI, Gloria (CERN)

Session Classification: -

Contribution ID: 29

Type: **not specified**

Fast simulation

Tuesday 16 May 2017 09:30 (20 minutes)

Presenter: CENCI, Riccardo (SNS and INFN-Pisa, Italy)

Session Classification: -

Contribution ID: **30**

Type: **not specified**

Deployment and validation of Git conditions database

Tuesday 16 May 2017 09:50 (20 minutes)

Presenter: CLEMENCIC, Marco (CERN)

Session Classification: -

Contribution ID: **31**

Type: **not specified**

Reconstruction changes in 2017

Session Classification: -

Contribution ID: **32**

Type: **not specified**

Status of PersistReco

Tuesday 16 May 2017 10:30 (20 minutes)

Presenter: MATEV, Rosen (CERN)

Session Classification: -

Contribution ID: **33**

Type: **not specified**

Stripping status

Tuesday 16 May 2017 10:50 (30 minutes)

Status of S24r0p1 (2015 incremental)

Readiness of S29 (2017 prompt)

How can commissioning of a stripping campaign be improved?

Presenter: ALEXANDER, Michael Thomas (University of Glasgow (GB))

Session Classification: -

Contribution ID: **34**

Type: **not specified**

Status of Yandex streaming optimisation

Tuesday 16 May 2017 11:20 (20 minutes)

Presenter: NEYCHEV, Radoslav (Yandex School of Data Analysis (RU))

Session Classification: -

Contribution ID: 35

Type: **not specified**

Discussion on streaming

Tuesday 16 May 2017 11:40 (30 minutes)

How can we improve our streaming strategy to optimise usage of disk, turnaround for analysts, restripping, operations

Session Classification: -

Contribution ID: **36**

Type: **not specified**

Hacking session

Session Classification: -

Contribution ID: 37

Type: **not specified**

Swan

Wednesday 17 May 2017 15:00 (20 minutes)

Presenter: PIPARO, Danilo (CERN)

Session Classification: -

Contribution ID: **38**

Type: **not specified**

Everware

Wednesday 17 May 2017 15:40 (20 minutes)

Interactive documentation in jupyter notebooks

Presenter: USTYUZHANIN, Andrey (Yandex School of Data Analysis (RU))

Session Classification: -

Contribution ID: **39**

Type: **not specified**

Intro

Tuesday 16 May 2017 14:00 (10 minutes)

Presenter: STAGNI, Federico (CERN)

Session Classification: -

Contribution ID: **40**

Type: **not specified**

Working Group productions: what's done so far

Tuesday 16 May 2017 14:10 (20 minutes)

Presenter: ROMANOVSKIY, Vladimir (Institute for High Energy Physics (RU))

Session Classification: -

Contribution ID: 41

Type: **not specified**

Working Group productions: mini tutorial

Tuesday 16 May 2017 14:30 (30 minutes)

Presenter: FALABELLA, Antonio (Universita e INFN, Bologna (IT))

Session Classification: -

Contribution ID: 42

Type: **not specified**

Working group productions: discussion + Q&A

Tuesday 16 May 2017 15:00 (20 minutes)

Session Classification: -

Contribution ID: 43

Type: **not specified**

Distributed computing team: activities, and prospects

Tuesday 16 May 2017 16:20 (20 minutes)

Presenter: CHARPENTIER, Philippe (CERN)

Session Classification: -

Contribution ID: 44

Type: **not specified**

Recent and upcoming developments in LHCbDIRAC

Tuesday 16 May 2017 15:20 (20 minutes)

Presenter: STAGNI, Federico (CERN)

Session Classification: -

Contribution ID: 45

Type: **not specified**

Introduction and Core Software news

Monday 15 May 2017 09:00 (10 minutes)

Presenters: COUTURIER, Ben (CERN); CLOSIER, Joel (CERN); CLEMENCIC, Marco (CERN)

Session Classification: -

Contribution ID: 46

Type: **not specified**

Distributed computing in Run 3 (following earlier discussion)

Friday 19 May 2017 10:00 (30 minutes)

Presenter: CHARPENTIER, Philippe (CERN)

Session Classification: -

Contribution ID: 47

Type: **not specified**

POPPER a protocol for reproducible science (remote)

Wednesday 17 May 2017 17:30 (30 minutes)

Presenters: JIMENEZ, Ivo (UC Santa Cruz); MALTZAHN, Carlos (University of California, Santa Cruz)

Session Classification: -

Contribution ID: 48

Type: **not specified**

Merging master and future, defining a common sequence

Thursday 18 May 2017 15:25 (25 minutes)

Presenter: PONCE, Sebastien (CERN)

Session Classification: -

Contribution ID: 49

Type: **not specified**

Open space: Challenges in AP

Wednesday 17 May 2017 16:20 (1h 10m)

We will split into discussion groups:

- Data storage and access
- Containerization and cloud resources
- Reuse of analysis code
- Analysis narrative
- Treasure hunt: forgotten issues

The goal is to define the major unsolved problems where more work is needed.

Session Classification: -

Contribution ID: 50

Type: **not specified**

Status of AFS phase-out

Monday 15 May 2017 09:10 (20 minutes)

Presenters: COUTURIER, Ben (CERN); CLOSIER, Joel (CERN); CLEMENCIC, Marco (CERN)

Session Classification: -

Contribution ID: 51

Type: **not specified**

Compiler and platforms evolution

Monday 15 May 2017 09:30 (20 minutes)

Discussion on the move to gcc 7 and other compilers

Presenters: COUTURIER, Ben (CERN); CLEMENCIC, Marco (CERN)

Session Classification: -

Contribution ID: 52

Type: **not specified**

lbinstall: the new LHCb installer

Monday 15 May 2017 09:50 (10 minutes)

Presenters: COUTURIER, Ben (CERN); CHITIC, Stefan-Gabriel (CERN)

Session Classification: -

Contribution ID: 53

Type: **not specified**

Investigations on the migration to python3

Monday 15 May 2017 10:00 (20 minutes)

Presenter: CHITIC, Stefan-Gabriel (CERN)

Session Classification: -

Contribution ID: 54

Type: **not specified**

Evolution of deployment system to CVMFS prod and dev

Monday 15 May 2017 11:05 (15 minutes)

Presenters: COUTURIER, Ben (CERN); CHITIC, Stefan-Gabriel (CERN)

Session Classification: -

Contribution ID: 55

Type: **not specified**

MIgration of the LHCb documentation to EOS web

Monday 15 May 2017 11:20 (20 minutes)

Presenter: CLEMENCIC, Marco (CERN)

Session Classification: -

Contribution ID: 56

Type: **not specified**

Improvements to LHCbPR2 and new integration tests

Monday 15 May 2017 11:40 (30 minutes)

Presenter: SZYMANSKI, Maciej Pawel (University of Chinese Academy of Sciences (CN))

Session Classification: -

Contribution ID: 57

Type: **not specified**

A new dashbord for the nightly builds and tests

Monday 15 May 2017 10:50 (15 minutes)

Presenter: CHITIC, Stefan-Gabriel (CERN)

Session Classification: -

Contribution ID: 58

Type: **not specified**

Recent and upcoming developments for Ganga and LHCb

Tuesday 16 May 2017 16:00 (20 minutes)

Presenter: SMITH, Mark (Imperial College (GB))

Session Classification: -

Contribution ID: 59

Type: **not specified**

HYDRA: a C++ framework for highly efficient computing on massively parallel architectures

Friday 19 May 2017 09:00 (20 minutes)

Presenter: Dr ALVES JUNIOR, Antonio Augusto (University of Cincinnati (US))

Session Classification: -

Contribution ID: **60**

Type: **not specified**

Overview of the CWP Project and Summaray of the Kick-Off Workshop

Monday 15 May 2017 14:00 (30 minutes)

Discussion of the Community White Paper project, organized by the HEP Software Foundation, and a summary of the first CP workshop, held in San Diego in January.

Presenter: GLIGOROV, Vladimir (Centre National de la Recherche Scientifique (FR))

Session Classification: -

Contribution ID: **61**

Type: **not specified**

Simulation Issues for the CWP

Monday 15 May 2017 14:30 (15 minutes)

Presenter: CORTI, Gloria (CERN)

Session Classification: -

Contribution ID: **62**

Type: **not specified**

Machine Learning issues for the CWP

Monday 15 May 2017 14:45 (15 minutes)

Presenter: SEYFERT, Paul (CERN)

Session Classification: -

Contribution ID: **63**

Type: **not specified**

1st Breakout Session

Monday 15 May 2017 15:00 (50 minutes)

We will break into small groups to review and edit CWP Google docs.

Presenter: SOKOLOFF, Michael David (University of Cincinnati (US))

Session Classification: -

Contribution ID: **64**

Type: **not specified**

Coffee Break

Monday 15 May 2017 15:50 (20 minutes)

You're on your own

Session Classification: -

Contribution ID: 65

Type: **not specified**

Discussions of Breakout Session Conclusions

Monday 15 May 2017 16:10 (50 minutes)

Each breakout session group will be asked to prepare a 5-minute presentation of what they did, and then we will discuss these commonly.

Presenter: SOKOLOFF, Michael David (University of Cincinnati (US))

Session Classification: -

Contribution ID: **66**

Type: **not specified**

Introduction

Friday 19 May 2017 14:00 (5 minutes)

Presenter: MCNAB, Andrew (University of Manchester)

Session Classification: -

Contribution ID: 67

Type: **not specified**

Experience with containers in LHCb services

Friday 19 May 2017 14:05 (30 minutes)

Presenter: HAEN, Christophe (CERN)

Session Classification: -

Contribution ID: **68**

Type: **not specified**

Singularity

Friday 19 May 2017 14:35 (30 minutes)

Presenter: JONES, Ben (CERN)

Session Classification: -

Contribution ID: **69**

Type: **not specified**

SkyGrid at Yandex

Friday 19 May 2017 15:05 (30 minutes)

Presenter: BARANOV, Alexander (Yandex School of Data Analysis (RU))

Session Classification: -

Contribution ID: 70

Type: **not specified**

Vac and Vcycle news

Friday 19 May 2017 15:35 (30 minutes)

Presenter: MCNAB, Andrew (University of Manchester)

Session Classification: -

Contribution ID: 71

Type: **not specified**

Community Whitepaper

Wednesday 17 May 2017 11:50 (10 minutes)

Presenter: SOKOLOFF, Michael David (University of Cincinnati (US))

Session Classification: -